

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012380**Date Inspected:** 03-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2130**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bernie Docena**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** 1E-Bottom Plate Deck Stiffeners**Summary of Items Observed:**

At the start of the shift the Quality Assurance Inspector (QAI) traveled to the project site and observed the following work performed by American Bridge/Fluor (ABF) personnel at the 1E/2E field splice:

A). Bottom Field Splice E1 to E2 Deck Stiffeners.

A). The QA Inspector observed the Flux Cored Arc Welding (FCAW-G) of the weld joint's identified as Weld Number's 1E-2E D-S1, D-S2, D-S4, DS-5, D-S8, D-S10, D-S14, D-S15 and D-S16. The welding was performed by ABF personnel Song Tao Huang (3794), Jim Quan Huang (9430) and James Zhen (6001). The QA Inspector also observed the ABF (QC) Inspector's Bernie Docena and Jesse Cayabyab performing Visual Testing (VT) on the welds. with No Rejectable Indications observed during the welding process. The ABF (QC) inspector's verified the minimum preheat temperature of 140°F and the maximum interpass temperature of 230°F. The welding performed during this shift was not completed. The QA Inspector also observed Quality Control (QC) inspector Bernie Docena verify the FCAW welding parameters and the surface temperatures during the welding process and the average readings were noted as follows: 210 amps, 22.8 volts with a travel speed measured between 205mm and 248mm per minute. The surface temperature was noted by the (QC) Inspector and was noted as follows. The minimum preheat temperature of 100°F and the maximum interpass temperature of 230°F.

Quality Control (QC) Inspector's Bernie Docena and Jesse Cayabyab monitored and verified welding parameters and surface temperatures utilizing a Fluke 337 Clamp Meter. The (QA) Inspector also verified welding parameters and preheat temperatures utilizing a Fluke 337 clamp meter for the electrical welding parameters and a Fluke 63 IR thermometer for verifying that the preheat and interpass temperatures were maintained. The consumables

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utilized during the welding were observed to be ESAB Dual Shield 70 Ultra Plus with an electrode size of 1.6mm. The ABF (QC) inspector's appeared to perform the visual examinations, monitoring and verification of the welding as per the contract documents. The welding and (QC) inspection performed on this shift was not completed and appeared to be in general compliance with the contract documents.



Summary of Conversations:

No relevant conversations noted at this time.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916)-227-5298, who represents the Office of Structural Materials for your project.

Inspected By:	Richmond,Gary
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Quality Assurance Inspector

Reviewed By:	Levell,Bill
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QA Reviewer
